marantz®

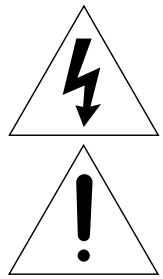
Model SR110 User Guide

Receiver

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK)
NO USER-SERVICEABLE PARTS INSIDE
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of suffi-cient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK,
DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION: POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU’AU FOND.

NOTE TO CATV SYSTEM INSTALLER:

This reminder is provided to call the CATV (Cable-TV) system installer’s attention to Article 820-40 of the NEC, that provides guidelines for proper grounding and, in particular, specified that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by tuning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTE:

Changes or modifications may cause this unit to fail to comply with Part 15 of the FCC Rules and may

IMPORTANT SAFETY INSTRUCTIONS

READ BEFORE OPERATING EQUIPMENT

This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operation precautions which you should be particularly aware of.

1. Read Instructions - All the safety and operating instructions should be read before the appliance is operated.

2. Retain Instructions-The safety and operating instructions should be retained for future reference.

3. Heed Warnings-All warnings on the appliance and in the operating instructions should be adhered to.

4. Follow Instructions-All operating and use instructions should be followed.

5. Cleaning-Unplug this video product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

6. Attachments-Do not use attachments not recommended by the video product manufacturer as they may cause hazards.

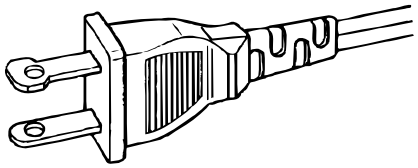
7. Water and Moisture-Do not use this video product near water-for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like.

8. Accessories-Do not place this video product on an unstable cart, stand, tripod, bracket, or table. The video product may fall, causing serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the video product. Any mounting of the appliance should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

9. Ventilation-Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the video product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the video product on a bed, sofa, rug, or other similar surface. This video product should never be placed near or over a radiator or heat register. This video product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

10. Power Sources-This video product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company. For video products intended to operate from battery power, or other sources, refer to the operating instructions.

11. Grounding or Polarization-This video product is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.



AC POLARIZED PLUG

12. Power-Cord Protection-Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

13. Protective Attachment Plug - The appliance is equipped with an attachment plug having overload protection. This is a safety feature. See Instruction Manual for replacement or resetting of protective device. If replacement of the plug is required, be sure the service technician has used a replacement plug specified by the manufacturer that has the same overload protection as the original plug.

14. Outdoor Antenna Grounding-If an outside antenna or cable system is connected to the video product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure 1.

15. Lightning-For added protection for this video product receiver during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the video product due to lightning and power-line surges.

16. Power Lines-An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

17. Overloading-Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

18. Object and Liquid Entry-Never push objects of any kind into this video product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the video product.

19. Servicing-Do not attempt to service this video product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

20. Damage Requiring Service-Unplug this video product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
    a. When the power-supply cord or plug is damaged.
    b. If liquid has been spilled, or objects have fallen into the video product.
    c. If the video product has been exposed to rain or water.
    d. If the video product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the video product to its normal operation.
    e. If the video product has been dropped or the cabinet has been damaged.
    f. When the video product exhibits a distinct change in performance-this indicates a need for service.

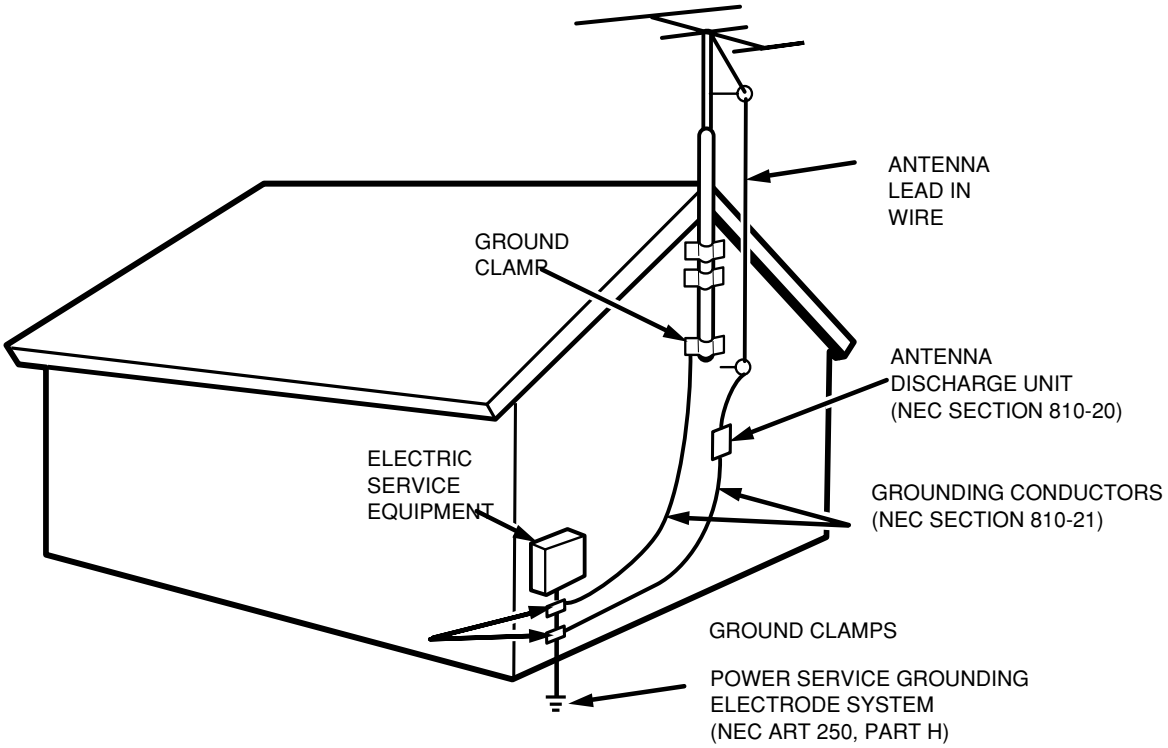
21. Replacement Parts-When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

22. Safety Check-Upon completion of any service or repairs to this video product, ask the service technician to perform safety checks to determine that the video product is in proper operating condition.

23. Carts and Stands-The appliance should be used only with a cart or stand that is recommended by the manufacturer.

24. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

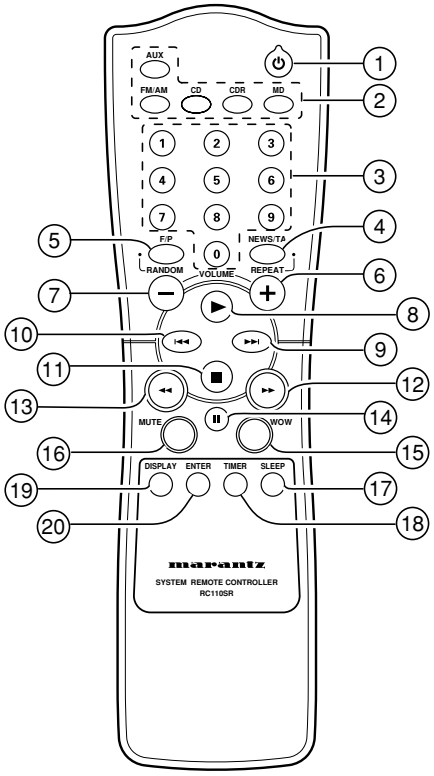
FIGURE 1
EXAMPLE OF ANTENNA GROUNDING ACCORDING TO NATIONAL ELECTRICAL CODE INSTRUCTIONS CONTAINED IN ARTICLE 810 - "RADIO AND TELEVISION EQUIPMENT"

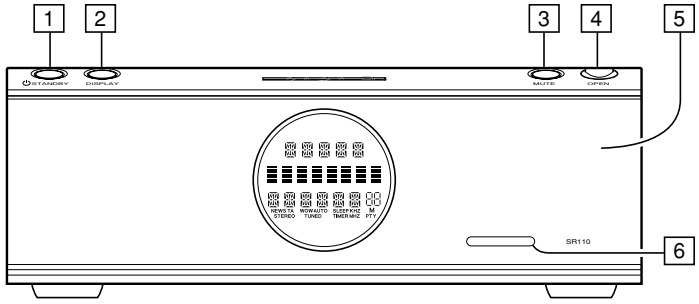


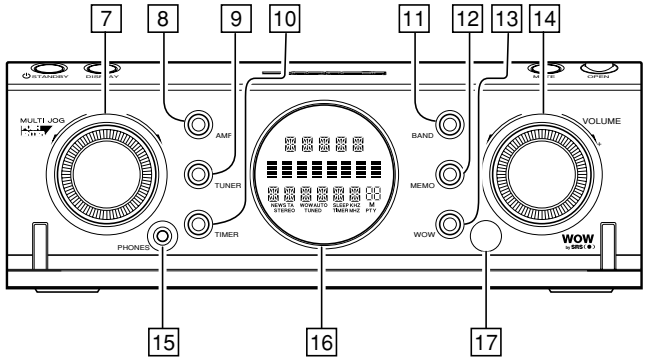
NEC - NATIONAL ELECTRICAL CODE

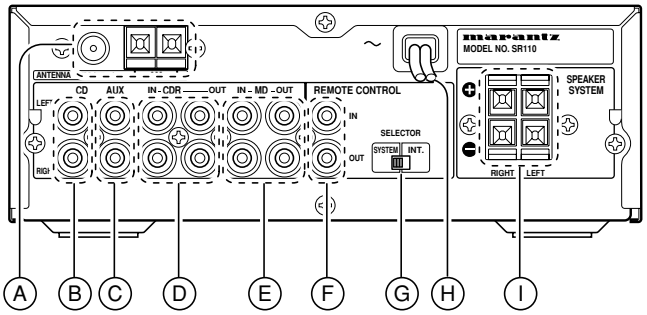
This Class B digital apparatus meets all requirements of the Canadian Interference - Cansing Equipment Regulations.

Cet appareil numérique de la Classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.


AUX
FM/AM
CD
CDR
MD
F/P
RANDOM
NEWS/TA
REPEAT
VOLUME
MUTE
WOW
DISPLAY
ENTER
TIMER
SLEEP
marantz
SYSTEM REMOTE CONTROLLER
RC110SR


STANDBY
DISPLAY
MUTE
OPEN
SR110


MULTI JOG
AMP
TUNER
TIMER
PHONES
BAND
MEMO
WOW
VOLUME


marantz
MODEL NO. SR110
ANTENNA
CD
AUX
IN - CDR
OUT
IN - MD - OUT
REMOTE CONTROL
IN
OUT
SELECTOR
SYSTEM
INT.
SPEAKER SYSTEM
RIGHT
LEFT

FOREWORD

This section must be read before any connection is made to the mains supply.

WARNINGS

Do not expose the equipment to rain or moisture.
Do not remove the cover from the equipment.
Do not push anything inside the equipment through the ventilation holes.
Do not handle the mains lead with wet hands.

EQUIPMENT MAINS WORKING SETTING

Your Marantz product has been prepared to comply with the household power and safety requirements that exist in your area.
SR110 can be powered by 120 V AC only.

PRECAUTIONS

The following precautions should be taken when operating the equipment.

GENERAL PRECAUTIONS

When siting the equipment ensure that:
- — the ventilation holes are not covered;
- — air is allowed to circulate freely around the equipment
- — it is on a vibration free-surface;
- — it will not be exposed to interference from an external source;
- — it will not be exposed to excessive heat, cold, moisture or dust;
- — it will not be exposed to direct sunlight;
- — it will not be exposed to electrostatic discharges

Never place heavy objects on the equipment.
If a foreign body or water does enter the equipment, contact your nearest dealer or service centre.
Do not pull out the plug by pulling on the mains lead, hold the plug.
It is advisable when leaving the house, or during a thunderstorm, to disconnect the equipment from the mains supply.

FEATURES

- Easy operation with remote control bus in SYSTEM mode operation
- High power output of the discrete configuration possesses a high level of reliability.
- 30-Station random preset tuner
- System operation switch

  This unit can be operated as a system component in combination with the CD, CD-R and MD players from the Marantz AV system.
- Program Timer/Sleep Timer

ABOUT THE WOW

WOW is a proprietary new algorithm from SRS Labs, which processes a stereo signal to provide extraordinary enhancement to the listening experience. Ordinary stereo present a rather limited spatial presentation, and often lack-luster bass (low frequency) performance. Any sound system including smaller multimedia speakers, headphones, mini stereos, portable “boom boxes” or televisions can deliver an audio performance with dramatically improved image size, dynamics and immersion when playing a signal processed with WOW. The procession of the spatial cues surrounds the listener with a holographic representation of the performance. In addition, TruBass builds upon WOW by providing bass that is deep, rich and controlled, through means that don’t require a large speaker or cabinet.

CONTROL BUTTON ON THE REMOTE CONTROL UNIT

① Power switch

Press this switch to turn the power of the unit ON. If components of Marantz AV system are connected through the REMOTE CONTROL bus, this will turn these components ON. Press this switch again to turn the unit OFF, and the unit enters standby mode.

② Function buttons

There are FM/AM, CD, CD-R, MD and AUX buttons. These buttons are used to select the source to be played or recorded. To switch the input selector of the receiver, press the button.

Function button control on the remote	Source to be played
FM/AM	FM or AM
CD	CD player (CD110)
CD-R	CD Recorder
MD	MD deck
AUX	AUX (TV game, etc.)

③ Numeric (ten keypad) button

These buttons are used to select the preset memory when FM/AM function is selected.
These buttons are used to enter the track or program number when CD or CD-R function is selected.

④ NEWS/TA / REPEAT button

This button is used to repeat the disc, tracks or programme when CD, CD-R or MD function is selected.

⑤ F/P / RANDOM button

This button is used to display the frequency or preset channel.
This button is used to random play when CD, CD-R or MD function is selected.

⑥⑦ – VOLUME + button

These buttons are used to change the volume for listening. Press the **+** button to increase and the **–** button to decrease the volume.

⑧ ► (Play) button

This button is unavailable when FM/AM function is selected.
This button is used to play the source disc when CD, CD-R or MD function is selected.

⑨ ►►| button

This button is used to increase the number on the tuner preset memory or advance to next track on CD, CD-R or MD.

⑩ |◄◄ button

This button is used to decrease the number on the tuner preset memory or return to previous tracks on CD, CD-R or MD.

⑪ ■ (Stop) button

This button is unavailable when FM/AM function is selected.
This button is used to stop the source disc playing/recording when CD, CD-R or MD function is selected.

⑫ ►► button

This button is used to increase the frequency when FM/AM function is selected.
This button is used to search forward when CD, CD-R or MD function is selected.

⑬ ◄◄ button

This button is used to decrease the frequency when FM/AM function is selected.
This button is used to search backward when CD, CD-R or MD function is selected.

⑭ ❚❚ (Pause) button

This button is unavailable when FM/AM function is selected.
This button is used to interrupt the source disc playing/recording when CD, CD-R or MD function is selected.

⑮ WOW button

This button is used to change the WOW function level.
Each press of this button change the WOW function level following order.
OFF → LOW → HIGH → OFF

Note:

When this button is pressed, the sound of speakers is muted momentary. This is not malfunction.

⑯ MUTE button

This button is used to mute the sound from the speakers. When this button is pressed, the speakers' sound level is muted and "MUTE" appears on the display. Pressing this button again cancels the muting function, and it can also be cancelled by pressing one of the function buttons.

⑰ SLEEP timer button

This button is used to set the sleep timer. Each press of this button change the sleep time following order.
10 → 20 → 30 → 60 → 90 → OFF (original display)
The display is dimmed when the sleep timer is set. The setting time passes, the power is turned off.

⑱ TIMER program button

This button is used to activate the timer program.

⑲ DISPLAY button

This button is used to change the display information (source, and present time) or brightness.

Note:

A present time can be displayed when the FM/AM function is set with function button. A present time can be also displayed for 10 seconds in standby mode when the FM/AM function is set with function button.

⑳ ENTER button

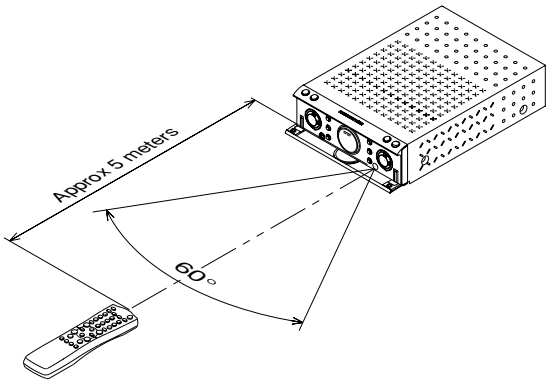
This button is used to decide for the receiver's JOG control.

OPERATION OF REMOTE CONTROL UNIT

1. REMOTE CONTROL

The distance between the transmitter of the remote control unit and the IR SENSOR of the SR110 should be less than about 5 meters. If the transmitter is pointed to a direction other than the IR SENSOR or if there is an obstacle between them, remote control may not be possible.

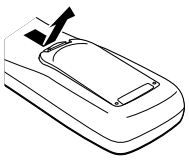
Remote-controllable range



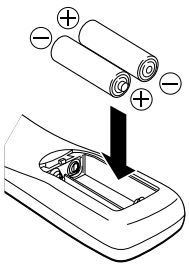
2. LOADING BATTERIES

The life of the batteries used with the remote control unit is about 6 months with normal use. Also be sure to replace batteries earlier when you notice that they are getting weak.

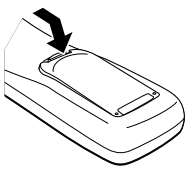
1. Remove the back cover.



2. Insert the new batteries (AA type) with correct (+) and (–) polarity.



3. Close until it clicks.



CONNECTORS AND CONTROLS ON THE MAIN UNIT

Ⓐ Terminal for FM antenna, 75 ohms

For connecting an external FM antenna with a circular plug, or for connecting a cable network.

Terminals for AM antenna and Grounding

To connect the supplied AM loop antenna, use the terminals marked “AM” and “GND”.
In areas where the AM loop antenna gives unsatisfactory results, it is recommended that the receiver be connected to an outdoor antenna. Use the terminal marked ‘AM’ for this. A grounding lead can be connected to the terminal marked ‘GND’ to further reduce interference. In this case, it must be connected together with the supplied loop antenna.

Ⓑ CD input jacks

Connect to the audio output jacks of a CD player.

Ⓒ AUX input jacks

Connect to the audio output jacks of the TV set, DVD player, etc.

Ⓓ CD-R input/output jacks

Connect the IN jacks to the output jacks of a CD-R player, and the OUT jacks to its input jacks.

Ⓔ MD input/output jacks

Connect the IN jacks to the output jacks of a MD player, and the OUT jacks to its input jacks.

Ⓕ REMOTE CONTROL jacks

Connect to a component equipped with remote control jacks. (Refer to page 3.)

Ⓖ System control switch

This switch selects the system operation mode. Set to SYSTEM position when the unit is being used in combination with a CD (CD110). If your component is not capable of system connection, set this switch to INT position.

Ⓗ AC power cord

Plug into an AC 120V household outlet.

Ⓘ SPEAKER terminals

Connect the left and right speaker leads, observing the + and – polarity of the leads and terminals.

1 STANDBY/power switch and indicator

Press to turn power ON and press again to switch to STANDBY mode. The indicator lights GREEN when power is ON, and lights RED when in STANDBY mode. The indicator lights AMBER when the timer program is set during STANDBY mode.

2 DISPLAY button

This button is used to change the display for information such as clock time.
A present time can be displayed for 10 seconds in standby mode by pressing this button.
The brightness of the display can be changed to dimmer or normal by pressing this button.

3 MUTE button

This button is used to mute the sound from the speakers. When this button is pressed, the speakers’ sound level is muted and “MUTE” appears on the display. Pressing this button again cancels the muting function, and it can also be cancelled by pressing one of the function buttons.

4 Door OPEN button

This button is used to open the door.

5 Front panel door

This door be opened by pressing the door OPEN button.

6 IR lens

You can operate the unit even if the receiver door is closed. The infrared signal from the remote control enters the unit through this lens and infrared sensor.

Note:

Never remove this lens. If you remove this lens, the receiver cannot receive the infrared signal from remote control when the SR110’s door is closed.

7 JOG control

The JOG control can be used in the AMP, TUNER and TIMER modes. Details of operation are as follows:

AMP mode: Source select (Usual setting)
Balance control (AMP button is pressed twice)
Treble control (AMP button is pressed three times)
Bass control (AMP button is pressed four times)
(When the AMP button is pressed once, volume control mode is set for volume control knob.)

TUNER mode: Frequency scan mode (last operation is memorised)
Preset memory mode (last operation is memorised)
Auto, Mono selecting Mode

TIMER mode: Program and confirm timer setting
For more detail, refer to the respective page.

8 AMP button

The JOG control can be used in the TUNER, AMP or TIMER modes. Press to change the mode of JOG control to AMP mode. 5 seconds after the previous JOG operation is finished, the mode of JOG control will return to AMP mode automatically. You can also use this button to return to AMP mode immediately. The function of JOG control in AMP mode is changed as follows (except the volume adjust mode):

SOURCE select mode: To select input mode.
(Volume adjust mode: To adjust the volume level by turning the volume control.**)**
Balance control mode: To adjust the speaker balance.
BASS control mode: Tone control (Low frequency)
TREBLE control mode: Tone control (High frequency)

The AMP mode is used for tone control (BASS/TREBLE) and to change also source for JOG control.

9 TUNER button

Press to select FM or AM tuner when another source is selected and select the JOG operation for TUNER selection. Use this button to select the JOG operation for a scan of frequency or preset memory mode. The TUNER button changes modes as below.

FREQUENCY mode: To scan tuning by frequency by JOG control.
PRESET mode: To scan tunings in the preset memory by JOG control.
TUNER mode: To change FM broadcasting to MONO or STEREO.
The “MONO” indicator lights up on the display in MONO position, the “AUTO” indicator lights up when there is no signal and “STEREO” lights up when a stereo signal is received.

Please refer to page 9 for tuner operations.

10 TIMER button

This button is used to program and check the timer program.
Please refer to page 11 for timer program operation.

11 BAND button

This button is used to change the reception band to FM or AM.

12 MEMO button

This button is used to set the preset memory of the tuner or clock time.
Please refer to the tuner and timer operations.

13 WOW button

This button is used to change the WOW function level.
Each press of this button change the WOW function level following order.
OFF → LOW → HIGH → OFF

Note:
When this button is pressed, the sound of speakers is muted momentary. This is not malfunction.

14 VOLUME control

To increase or decrease sound level. To increase the sound level turn clockwise, and to decrease turn counter-clockwise.

15 PHONES jack

For connecting a pair of stereo headphones. When the headphones are connected to this jack, the speaker sound is turned off.

Note:
Door cannot be closed when headphones connected.

16 Display panel

This panel shows information on the status of the unit.

17 Infrared sensor

The infrared signal from the remote control enters the unit through this sensor.

ENGLISH

CONNECTIONS

SYSTEM CONNECTION

FEATURES OF SYSTEM CONNECTION

- **Synchronized power ON/OFF**
  By switching the **power** switch ①/1, you can turn the CD player, CD Recorder and MD deck connected through the REMOTE CONTROL bus connection ON or OFF.
  You cannot turn on and off by pressing the power switch of connected components.
- **Auto source selection**
  When the CD in the CD110 starts playing by pressing the play button on the CD110, the SR110 receiver will change source automatically.

CONNECT TO SYSTEM CONNECTION

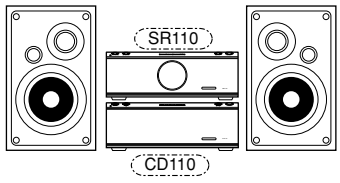
This unit is equipped with the remote control bus function. Connecting it to Marantz AV system components equipped with REMOTE CONTROL jacks, such as a CD player (CD110), means that these components can be remote controlled from this unit (SR110).
Connect the REMOTE CONTROL jacks of this unit to the REMOTE CONTROL jacks of another component using RCA-type pin lead provided.
To operate the SR110 in the SYSTEM mode, the leads from the other components must be connected to the SR110.
The lead from OUTPUT terminal of other component is connected to INPUT terminal of the SR110.
Set the REMOTE CONTROL selector of this unit (SR110) to **SYSTEM** position. Set the REMOTE CONTROL selector of connected components to **EXT** position.

Note:

- Plug into AC outlet after all connections are finished.
- When connecting the supplied audio cable, confirm the red plugs are connected to R jacks and the white plugs are connected to L jacks.
  We recommend you use to supplied audio cable.
- When using the supplied digital optical cable, remove the dust cover.
- Attach the dust cover to prevent dust when removing the digital optical cable.
- When connecting the digital optical cable, make sure it is fully inserted.

IMPORTANT

- When the system connection is setup, SR110 and CD110 should be stacked as following figures.



SYSTEM OPERATION

The remote control system can be used to control Marantz system components equipped with REMOTE CONTROL (Bus) jacks and SYSTEM (Bus) jacks, such as CD110. An example procedure for system operation is described below. Here, we take as an example the connection of a CD player (CD110) to this receiver (SR110) through the REMOTE CONTROL jacks. (The numbers of controls and buttons on the main unit are enclosed in □, and those on the remote control are enclosed in ○.)

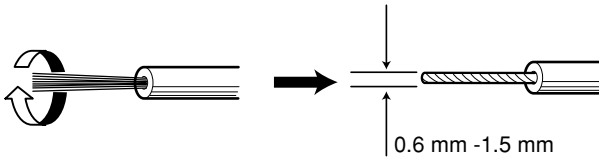
1. Press the **power** switch ①/1 to turn the receiver power ON.
2. All the components connected to the REMOTE CONTROL jacks are turned ON.
3. Press the **CD** button ② to select CD player as a source and set the remote control to CD mode.
4. Press the "**5**" of the **numeric** button ③ to select track number 5 of the CD.
5. The CD player (CD110) starts to play the CD.
6. Press the **VOLUME** buttons ⑥⑦ or turn the **VOLUME** control 14 to adjust the listening volume.
7. Press the ■ ⑪ button to stop the CD.
8. Press the **power** switch ①/1 to turn the power off and into the standby mode.
   The SR110 receiver and all the components connected to it are turned OFF.

NO SYSTEM CONNECTION

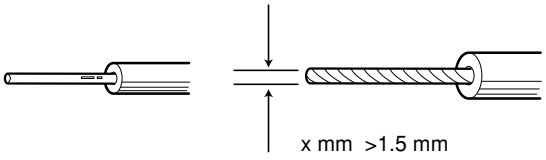
You can use connected components as a single unit by setting the system control switch to **INT** position.
When you use this unit in combination with other Marantz components for which a system connections is not possible, or components of other brands, you can use them independently by setting the system control switch to **INT** position.

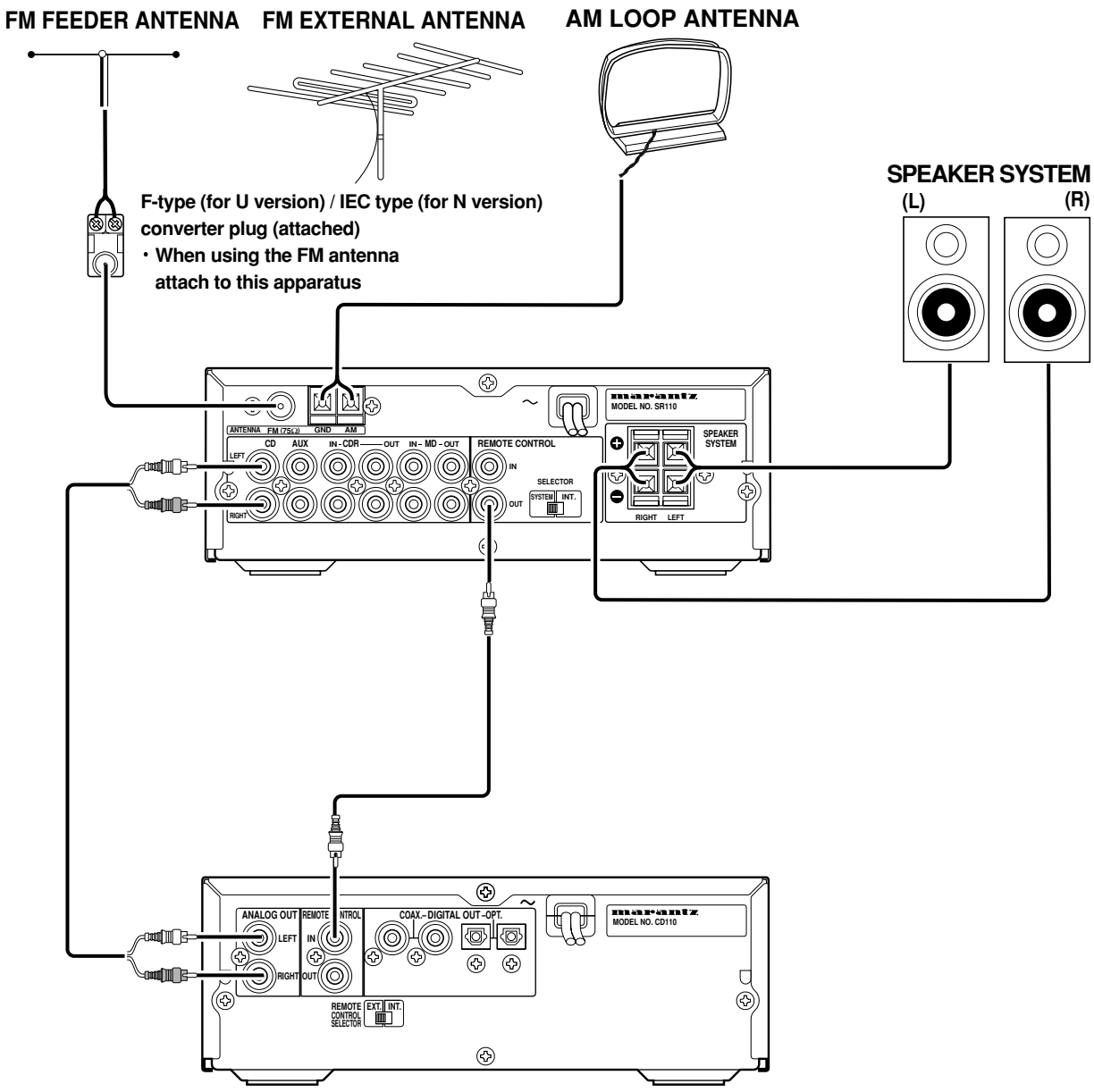
NOTE OF SPEAKER CABLE

When connecting the speaker cable, you use the cable as following figures;



Never use the cable as following figures. If you use the following cable, the speaker terminal may be damaged.




FM FEEDER ANTENNA
FM EXTERNAL ANTENNA
AM LOOP ANTENNA
SPEAKER SYSTEM
(L)
(R)
F-type (for U version) / IEC type (for N version)
converter plug (attached)
• When using the FM antenna
attach to this apparatus
marantz
MODEL NO. SR110
ANTENNA FM (75Ω) GND AM
CD AUX IN - CDR OUT IN - MD - OUT
REMOTE CONTROL
SELECTOR
SYSTEM INT.
SPEAKER SYSTEM
RIGHT LEFT
marantz
MODEL NO. CD110
ANALOG OUT
LEFT
RIGHT
REMOTE CONTROL
IN
OUT
COAX. - DIGITAL OUT - OPT.
REMOTE CONTROL SELECTOR
EXT. INT.

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BASIC OPERATIONS

NORMAL PLAY

1. Press the **power** switch ①/1 to turn the power ON.
2. Press the optimum **function** button ② or turn **JOG** control 7 in the SOURCE select mode to select the source to be played. Please refer to the next table.

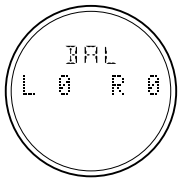
Function button control on the remote	Source to be played
FM/AM	FM or AM
CD	CD player (CD110)
CDR	CD recorder
MD	MD deck
AUX	AUX (TV game, etc.)

3. Start playing the source component. Adjust the listening volume with the **VOLUME** control 14 or **VOLUME** buttons ⑥⑦.
   The source selector will change players automatically in SYSTEM mode.

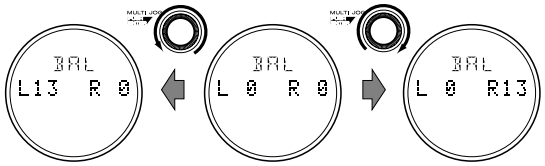
TO ADJUST BALANCE

The speaker balance can be changed by JOG control.

1. Press the **AMP** button 8 twice to set the mode of the **JOG** control 7 to BALANCE mode.
   "**BAL**" is displayed.



2. Turn the **JOG** control 7 to adjust the speaker balance within approx. 5 seconds.

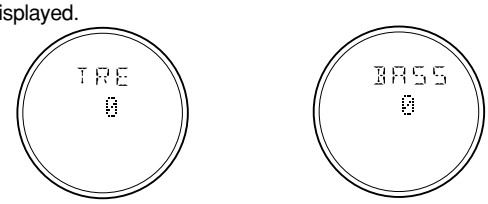


   Turn left to increase the "L" digit and decrease the output of the right speaker. Turn right to increase the "R" digit and decrease the output of the left speaker.
   The balance step can be changed up to 13.
3. To set and return the original display, press the **JOG** control 7.

TO ADJUST TONE CONTROL (BASS AND TREBLE)

The Bass and Treble frequencies can be controlled by JOG control.

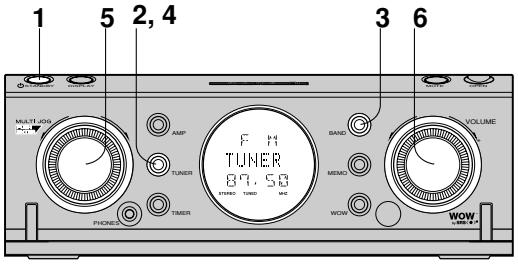
1. Press the **AMP** button 8 three or four times to set the mode of **JOG** control 7 to TONE control mode. "**TRE**" or "**BASS**" is displayed.



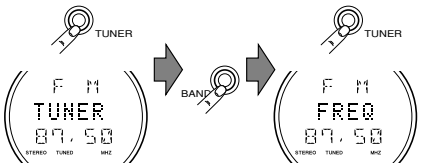
2. Within approx. 5 seconds, turn the **JOG** control 7 to the left to decrease, or to the right to increase step by step.
   You can both increase and decrease the tone for 5 step
   To set and return the original display, press the **JOG** control 7.

TUNER OPERATION

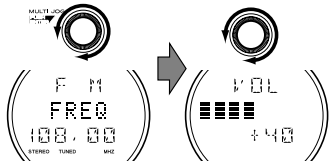
TO LISTEN TO THE TUNER



1. Press the **power** switch ①/1 to turn the power ON.
2. Press the **TUNER** button 9 or **FM/AM** button ②.
   "**TUNER**" is displayed.



3. To select the band of reception, press the **BAND** button 11 or the **FM/AM** ② button on the remote control.
4. Press the **TUNER** button 9 to set the frequency.
   "**FREQ**" is displayed.
5. Turn the **JOG** control 7 clockwise to increase or counter-clockwise to decrease the frequency, or press ►► button ⑫ to increase or ◄◄ button ⑬ to decrease.



Auto scan tuning

To start the auto scan tuning, turn the **JOG** control 7 or press and hold ◄◄/►► button ⑫/⑬ for a while continuously. Auto scan tuning stops automatically when a broadcasting station is tuned in, and the "**TUNED**" display lights up. When SR110 receives stereo broadcasting, "**STEREO**" display also lights up.

6. Adjust the volume with the **VOLUME** control 14 or **VOLUME** buttons ⑥⑦.
   To receive sound in monaural, press the **TUNER** button 9 until "**TUNERMOD**" is displayed. Turn the **JOG** control 7 to display "**MONO**".

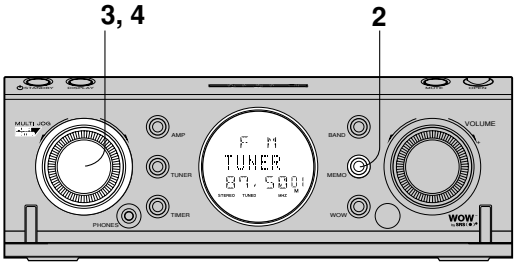
Note:

- "**AUTO**" is set at initial. In this case, the noise is muted when SR110 tunes a frequency of FM band which has no broadcasting.
- Muting of the FM band is not activated when the tuner mode is set to MONO. Please take care with the volume.

PRESET MEMORY OPERATION

The SR110 receiver can store up to 30 stations selected in the FM and AM bands.
The preset memory function allows frequency, receiving mode (STEREO or MONO) and also station name to be stored in the memory. The preset memory can be stored in two ways:

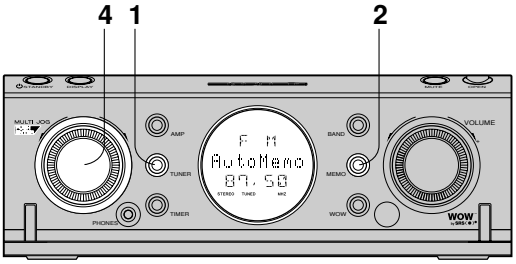
Manual preset memory



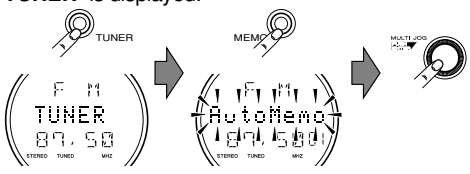
1. Select the desired station, referring to "TUNER OPERATION".
2. Press the **MEMO** button 12.
   The "**M**" indicator will blink for approx. 5 seconds.
   During this period.
3. Select the preset number by turning the **JOG** control 7 right for up or left for down
4. Press the **JOG** control 7 to decide.
   The preset number can be selected by directly entering it with the numeric buttons on the remote control.

Auto preset memory

This allows a band to be scanned automatically, a station with good reception to be found and to be stored in the preset memory.



1. Press the **TUNER** button 9 or **FM/AM** button ②.
   "**TUNER**" is displayed.



2. Press and hold down the **MEMO** button 12 for 3 seconds or more.
   The auto preset memory operation starts.
   "**AutoMemo**" is blinking.
3. When a station is received, scanning pauses for 5 seconds.
4. Press the **JOG** control 7 to store the received station within 5 seconds. The scanning restarts after pressing the **JOG** control 7.
   If the **JOG** control 7 is turned within 5 seconds, scanning restarts and the frequency being received is not stored in the memory.

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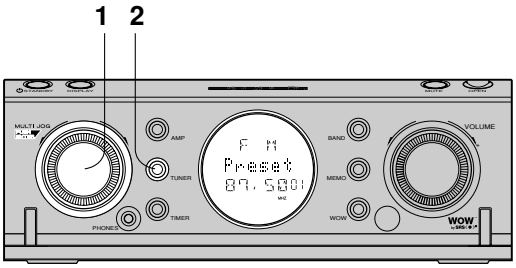
5. When up to 30 stations have been preset, the auto preset memory function automatically stops.
To stop in mid-operation, press the **MEMO** button 12 or the "**0**" button ③ on the remote control.

Note:

- If you operate the auto preset memory again, new received frequency is stored into the preset memory 01 to 30. The previous preset memories are replaced to new one.
- Preset Memory is not erased. Preset memory can be replaced only.

RECALLING A STATION FROM THE PRESET MEMORY



1. Press **TUNER** button 9 until "**Preset**" is displayed.
2. Turn the **JOG** control 7 or press the ⏮ ⑩ or the ⏭ button ⑪ to select a station.
For direct selection with the remote control, press numeric button.

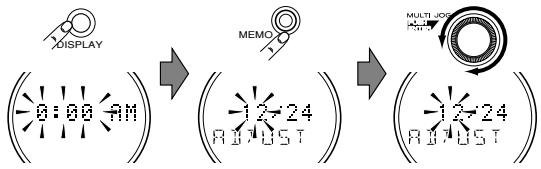
MEMORY BACKUP

The preset memory is stored for 1 week if the AC plug is pulled out the AC outlet. If this period is longer than 1 week, the memory is cleared. In this time, you need to set the preset memory again.

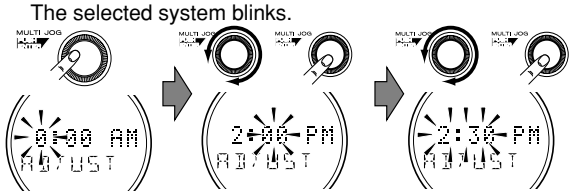
PRESENT TIME SETTING

To operate the timer program, you must set the present time.
The clock time can be set 12-hour or 24-hour system.
The following shows as an example how to set the time as 2:30 PM.
The clock displays "**0:00**" at initial

Operation using the main unit

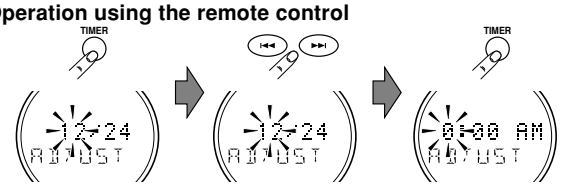


1. Press the **DISPLAY** button 2 until the clock time is displayed.
2. Press the **MEMO** button 12.
   "**12/24**" is displayed.
3. Turn the **JOG** control 7 to select "12".
   When you select "24", the clock is set 24-hour system.
   The selected system blinks.

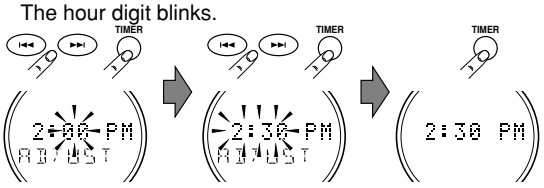


4. Press the **JOG** control 7 to desired the system.
   The hour digit blinks.
5. Turn the **JOG** control 7 to set the digits displayed to the left of the colon to "**2:00 PM**" and press the **JOG** control 7.
   The minute digit blinks.
6. Turn the **JOG** control 7 to set the minutes to "**30**", and press the **JOG** control 7.
   The display blinks.
7. Press the **JOG** control 7 to confirm the actual clock. The clock now starts.

Operation using the remote control



1. Press the **TIMER** button ⑱ more than 3 seconds.
   "**12/24**" is displayed.
2. Press the I◄◄ ►►I button ⑨ ⑩ to select "12".
   When you select "24", the clock is set 24-hour system.
   The selected system blinks.
3. Press the **TIMER** button ⑱ to confirm the system.
   The hour digit blinks.



4. Press the I◄◄ ►►I button ⑨ ⑩ to set the digits displayed to the left of the colon to "**2:00 PM**" and press the **TIMER** button ⑱.
   The minute digit blinks.
5. Press the I◄◄ ►►I button ⑨ ⑩ to set minutes to "**30**", and press the **TIMER** button ⑱.
   The display blinks.
6. Press the **TIMER** button ⑱ to confirm the actual time. The clock now starts.

PROGRAMME TIMER SETTING

You can play marantz CD player CD110, when it is connected with remote control bus correctly.
The timer function is built into this receiver allows you to perform the following operations:

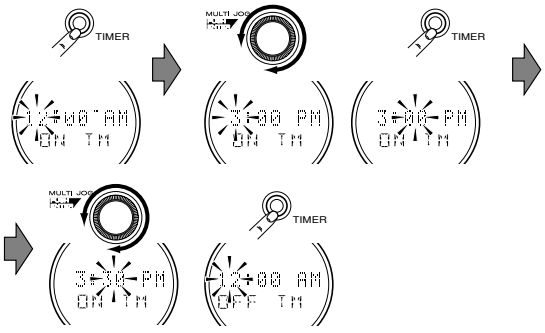
- Setting of ON time and OFF time;
- Setting of source: The source can be selected from tuner, CD;
- It is possible to specify the preset number 1 to 30 or track numbers of CD;
- Setting of single operation (Once) or everyday operation (Everyday).

IMPORTANT:

- The timer setting with track number specified can be used only when the system control switch is set to **SYSTEM** position except when only using the tuner. (Refer to page 6.)

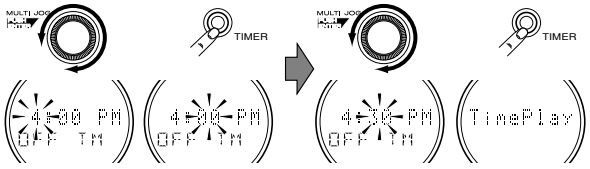
In the following procedure, each button should be pressed within 5 seconds after pressing the previous button.

1. Press the **power** switch 1 to turn the power of the unit ON.
2. Press the **TIMER** button 10. The display indicates "**ON TM**" and the timer section blinks.
3. **Set the On time.**



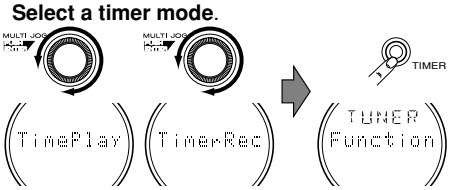
   1 Turn the **JOG** control 7 to adjust the hour for the On time and press the **TIMER** button 10.
   2 Turn the **JOG** control 7 to adjust the minutes for the On time and press the **TIMER** button 10.
   The display indicates "**OFF TM**" and the timer section blinks.

4. **Set the Off time.**



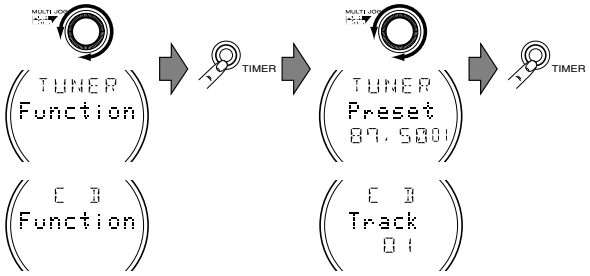
   1 Turn the **JOG** control 7 to adjust the hour for the Off time and press the **TIMER** button 10.
   2 Turn the **JOG** control 7 to adjust the minutes for the Off time and press the **TIMER** button 10.
   "**TimePLAY**" is displayed.

5. **Select a timer mode**.



   1 Select the "**TimePLAY**" by turning the **JOG** control 7.
   The recording mode is unavailable for this version.
   2 Press the **TIMER** button 10.

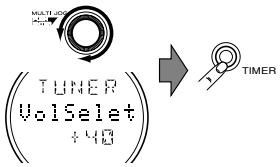
6. Select a function (Play mode)



1 Turn the **JOG** control [7] to select the source (TUNER or CD) to be played.
2 Press the **TIMER** button [10].
3 When you select "**TUNER**", turn the **JOG** control [7] to select a preset number to be received.
When you select "**CD**", turn the **JOG** control [7] to select a track number to be played.
4 Press the **TIMER** button [10].

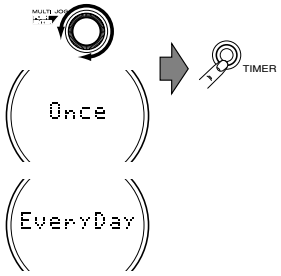
Note:
If you select a track number which is not on the CD, the play mode will start track number 1 when the timer activates.

7. Adjust the volume level



1 Turn the **JOG** control [7] to adjust the volume level.
2 Press the **TIMER** button [10].

8. Set Once or Daily



1 Turn the **JOG** control [7] to select the "**Once**", when you use this programmed event only once.
Turn the **JOG** control [7] to select the "**EveryDay**", when you use this programmed event everyday.
2 Press the **TIMER** button [10].

Note:
If you select the "**TimerOff**", this setting is cancelled.
In recording mode, the power is turned on before 1 minute at timer setting time.

9. Press the **TIMER** button [10] to decide the setting.
"**TIMER**" lights up in red. The setting contents are scrolled.

10. Press the **power** switch [1] to set the timer standby mode.
This system (SR110 and the connected components) is set standby mode and the displays are turned off. The power switch of SR110 lights up in amber.

Note:
Timer will not be activate when the power is turned on. Set the standby mode to activate the timer.
You can set the timer standby mode by pressing the **power** switch [1] while scrolling the setting contents.

PROGRAMME TIMER SETTING WITH REMOTE CONTROL

You can set the timer setting with the **power**, ⏮, ⏭ and **TIMER** buttons on the remote control.
Press the ⏮ or ⏭ button ⑨ ⑩ instead of turning the **JOG** control [7].
Other procedures are same as "Programme Timer Setting" with SR110.

Important
- Timer play mode cannot activate when no disc is inserted in the selected source.

NOTE OF THE TIMER FUNCTIONS

- If the displayed time blinks, the time is incorrect. You need to set the correct time.
- SR110 can save the present time for 5 minutes if the AC plug is pulled out the AC outlet. If the AC plug is plugged into the AC outlet within this period (5 minutes), the present time data is hold. You do not need to set the present time again.

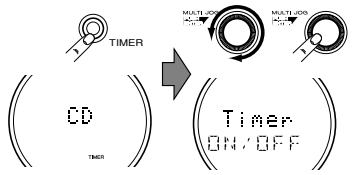
CONFIRM AND CHANGE TIMER SETTING

1. Press the **power** switch ①/[1] to turn the power of the unit ON.
2. Display the contents of timer setting by pressing the **TIMER** button ⑱/[10].
The following programmed contents are displayed by pressing the **TIMER** button ⑱/[10].
3. You can change the displayed content with the **JOG** control [7] if necessary.
4. Press the **power** switch ①/[1] again.

Important
- Timer mode is cancelled if you quit confirming halfway through a procedure.
- Never confirm the setting after play mode starts, this will lead to the off timer setting is cancelled and the power is not turned off.

CANCEL TIMER SETTING

1. Press the **power** switch ①/[1] to turn the power of the unit ON.



2. Press the **TIMER** button [10] on the front panel until "**Timer ON/OFF**" is displayed.
3. Turn the **JOG** control [7] to select "**OFF**".
4. Press the **JOG** button [7].

Important

- "**TIMER**" indicator is extinguished when **TIMER** button [10] is pressed for 3 seconds or more in timer playing or recording mode.
- Never set "**Once**" or "**Everyday**" in timer playing or recording mode. If this is set, the off timer is concealed and the power is not turned off. You should no operate after you confirm the setting time, the display will return original.

SLEEP TIMER SETTING (REMOTE CONTROL ONLY)

The sleep timer function allows the unit to be in standby mode automatically after a specified period of time.

1. While the power is ON, press the **SLEEP** button ⑰ in the AMP mode.
2. Press the **SLEEP** button ⑰ within 5 seconds. Each press changes the sleep timer period in the order
   10 → 20 → 30 → 60 → 90 → OFF(original display).
3. When the desired period is displayed, release the **SLEEP** button ⑰. After that, setting of the sleep timer is completed and the count starts.
4. Press the **SLEEP** button ⑰ during the sleep timer count to display the remaining period in standby mode. To change the setting after the sleep timer has started the count, display the remaining time, press the **SLEEP** button ⑰ while the remaining period is displayed, and repeat steps 3 and 4 above.
5. To cancel the sleep timer, press **SLEEP** button ⑰ until "**OFF**" is displayed.

TROUBLE SHOOTING

Should faults occur, in many cases it is not necessary to consult your dealer or a Marantz technical service department.
On the basis of the following checks you will be able to rectify a number of faults yourself without difficulty.
If the fault cannot be remedied after the following checks, please consult your dealer or nearest Marantz service agent.

Sound comes from only one side.

- Check the connections of the loudspeaker which is not working.
- Check the connections between the sound source and the receiver.
- If using headphones, check that the plug is properly inserted into the jack.

There is hum, buzz or howl during recording or playing.

- Are the connection plugs pushed far enough into the jacks?

You cannot hear anything, and no indicator lights up.

- The receiver is not turned ON.
- The receiver is not connected to the mains power outlet.
- The mains power outlet is not live.

You cannot hear anything, but an indicator lights up.

- Are the function buttons in the correct positions?
- Is the selected sound source functioning properly?
- Is the volume control high enough? Do not keep it in the maximum position! The display indicates the volume level at the moment the power is turned ON.
- Are the loudspeakers connected properly?

The recording is unsuccessful.

- Is the signal source operated correctly?

The remote control is not working.

- Check that the batteries of the remote control unit are not exhausted.
  If they are, replace them with two new batteries.

Easy operation is not working.

When the CD or other component starts playing, the receiver changes source automatically. If this function is not working –

- Check that the system control switch on the rear panel is set to SYSTEM position
- Check the connections of the remote control bus in SYSTEM mode (the system control switch set to SYSTEM position).

Please refer to **CONNECTION OF REMOTE CONTROL bus** page 6.

TECHNICAL SPECIFICATIONS

FM TUNER SECTION

- Frequency Range ..... 87.5 - 108.0 MHz
- Usable Sensitivity ..... 0 dBμ
- Signal to Noise Ratio ..... Mono/Stereo 70/65 dB
- Distortion ..... Mono/Stereo 0.2/0.3 %
- Stereo Separation ..... 1 kHz 40 dB
- Image Rejection ..... 98 MHz 80 dB
- Tuner Output Level ..... 1 kHz, ± 40 kHz Dev 500 mV

AM TUNER SECTION

- Frequency Range ..... 520 - 1710 kHz
- Signal to Noise Ratio ..... 40 dB
- Usable Sensitivity ..... Loop 500 μV
- Distortion ..... 400 Hz, 30 % Mod. 0.5 %
- Selectivity ..... ± 18 kHz 30 dB

AUDIO SECTION

- THD 10 % ..... 6 ohms 25W / Ch
- Continuous Power Output
  - (40 Hz - 20 kHz) ..... 8 ohms 21W / Ch
- THD (40 Hz - 20 kHz) at 21 W output ..... 8 ohms 0.08 %
- Input Sensitivity/Impedance
  - Linear ..... 200 mV/ 47 Kohms
- Signal to Noise Ratio
  - Linear (1 W) ..... 80 dB

GENERAL

- Power Requirement ..... AC 120 V 60 Hz
- Power Consumption ..... 0.7 A
- Dimension (MAX)
  - Width ..... 8-1/4 inches (210 mm)
  - Height ..... 2-3/4 inches (71.5 mm)
  - Depth ..... 12-3/16 inches (310 mm)
  - Weight ..... 9.5 lbs(4.3 Kg)

ACCESSORIES

- Remote Control Unit (RC110SR) 1
  - Dimension (W x H x D) (MAX) ..... 2-1/2 x 7-3/4 x 1-1/8 inches (57 x 196.5 x 27 mm)
  - Weight ..... 0.2 lbs(90 g)
- AA Type Batteries 2
- FM Feeder Antenna 1
- FM Converter Plug 1
- AM Loop Antenna 1
- Warranty Card (for USA) 1
- Warranty Card (for CANADA) 1
- User's Guide 1

Specifications subject to change without prior notice.

COUNTRY	COMPANY	ADDRESS
ALGERIE	Azur 2000	8, Lotissement Ben Hatadi, Alger, Algerie
ARMENIA	NGYIG Ltd.	47 A/75 St. Lalaiants, 375000 Yerevan, Armenia
AUSTRALIA	Jamo Australia Pty. Ltd.,	24 Lionel Road, Mt. Waverley, VIC 3149, Australia
AUSTRIA	Huber & Prohaska GmbH	Taborstraße 95 / Ladestraße 1, Gebäude Hangartner, A-1200 Wien, Austria
BAHREIN	Ambassador Stores	P.O. Box 237,141, Government Avenue, Manama,Bahrein
BANGLADESH	Target	1078, Ramjoy Mohanja Lane Asadgonj, Chittagong 4000, Bangladesh
BELGIUM	Van der Heyden Audio N.V.	Brusselbaan 278, 9320 Erembodegem, Belgium
BULGARIA	Ariescommerce GmbH	Makedonia Blvd. 16, 1606 Sofia, Bulgaria
CANADA	Lenbrook Industries Limited	633 Granite Court, Pickering, Ontario
CHINA	Guang Chang Audio International Co., Ltd.	No.38 Yushan Road, ShiQiao, Pan Yu, Guang Dong, China
CYPRUS	Empire Hifi systems Ltd.	P.O. Box 5604, Nicosia, Cyprus
CZECH REPUBLIC	Audio International	Sokolska 41, 67902 Rajecko, OKR,Blansko, Czech Republic
DENMARK	Audio Nord	Dali Allé 1, 9610 Noerager, Denmark
DUBAI	V.V.& SONS	P.O. Box 105, Dubai, U.A.E.
EGYPT	Solimco	9, El Attibaa St. Doki, Cairo, Egypt
ESTONIA	HiFi Club Estonia	Ehte 4, 90503 Haapsalu, Estonia
F.Y.R.O.M.	T.P. KODI	ul.Cedomir Kantargiev 21a, Skopje, Former Yugoslavian Republic of Macedonija
FINLAND	Audio Nord	Uudenmaankatu 4-6, Helsinki SF-00120, Finland
FRANCE	Marantz France	A division of Marantz Europe B.V., P.O. Box 301, 92 156 Suresnes Cedex, France
GERMANY	Marantz Deutschland	Hakenbusch 3, 49078 Osnabrück, Germany
GREECE	Adamco S.A.	188, Hippocratous Street, 11471 Athens, Greece
HEADQUARTERS EUROPE:	Marantz Europe B.V.	Building SFF-2, P.O. Box 80002, 5600 JB Eindhoven, The Netherlands
HONG KONG	Marantz Asia Ltd.	Unit 1706, Metroplaza II, 223 Hing Fong Road, Kwai Fong, N.T., Kowloon, Hong Kong
HUNGARY	Infovox Ltd.	Terez Krt.31, 1067 Budapest, Hungary
ICELAND	ID Electronics Ltd.	Armula 38, 108 Reykjavik, Iceland
INDIA	NOVA Audio Private	8,Punam Co-op.Society 29/30 Road#5, Union Park MUMBAI 400052, India
IRAN	Home Co.	5th floor no 878 Philips Building Enghelab ave, P.O. 11365/7844 Tehran, Iran
IRELAND	Marantz Ireland	Clonskeagh, Dublin 14, Ireland
ISRAEL	Elmor Ltd.	52 Heh Beiyar Street, Kikar Hamedina, Tel Aviv, Israel
ITALY	Marantz Italy	Via Casati 23, 20052 Monza (Milano), Italy, Servizio Consumatori 1678-20026, Numero Verde
IVORY COAST	Hifivoir	B.P. 2428, Abidjan 01, Ivory Coast
JAPAN	Marantz Japan Inc.	35-1 Sagami Ohno 7-Chome, Sagamihara-shi, Kanagawa 228-8505, Japan
KOREA	Mk Enterprises Ltd.	121-210, 2F Shinhan Bldg., 247-17 Seokyo-dong, Mapo-ku, Seoul, Korea
KUWAIT	alAlamiah Electronics Intl.	P.O. Box 8196, Salmiah 22052, Kuwait
LATVIA	Ace Ltd.	61, LacPlesa Str., Riga LV 1011, Latvia
LEBANON	AZ Electronics S.A., 1,	P.O. Box 11 2833, Beirut, Lebanon
LITHUANIA	Accapella Ltd.	Ausros, Vartu G/5, Pasazo SKG., 2001 Vilnius, Lithuania
MALAYSIA	Wo Kee Hong Electronics Sdn. Bhd.	102 Jalan SS 21/35, Damansara Utama, 47400 Petaling Jaya, Selangordarul Ehsan, Malaysia
MALTA	Doneo Co Ltd.	78 The Strand, Sliema SLM07, Malta
MAURITIUS	SKR Electronics Ltd.	P.O. Box 685, Bell Village, Port Louis, Mauritius
MILITARY MARKET EUROPE	PASCO GmbH	PO BOX 1280, Sandhausen 69200, Germany
NETHERLANDS	Marantz Domestic Sales	A division of Marantz Europe B.V., Building SFF2, P.O. Box 80002, 5600 JB Eindhoven, The Netherlands
NEW ZEALAND	Wildash Audio Systems	14 Malvern Road, Mt. Albert, Auckland, New Zealand
NORWAY	Audio Nord	Sandkerveien 64, Oslo 0483, Norway
OMAN	Mustafa & Jawad Trading CO.	P.O. Box 1918, Ruwi, Oman
POLAND	Philips Polska Sp. z.o.o.	Al.Jerozolimskie 195b, 02 222 Warszawa, Poland
PORTUGAL	Corel2	Comércio de Electrónica Lda., Av. Luís Bívar, No 85 A, 1050 Lisboa, Portugal
PROFESSIONAL EUROPE	Marantz Professional Products	Kingsbridge House, Padbury Oaks, 575-583 Bath Road, Longford, Middlesex UB7 0EH, U.K.
PROFESSIONAL U.S.A.	Marantz Professional Products	Distributed by: Superscope Technologies Inc., 1000 Corporate Blvd. Ste.D, Aurora, Illino
QATAR	Almana & Partners W.W.L.	P.O. Box 49, Doha, Qatar
REUNION	Vision +	180 Rue du Marechal Leclerc, 97400 Saint Denis, Ile de la Reunion
ROMANIA	Nova Music Entertainment	5, Zagazului Str. Bl.1G,apt.18, sector 1,Bucharest, Romania
RUSSIA	Absolute Audio	7/2, Montazhnaya Street, 107497 Moscow, Russia
SAUDI ARABIA	Adawlia Univ. Electr. Apl	P.O. Box 2154, Alkhobar 31952, Saudi Arabia
SINGAPORE	Forward Marketing (S) Pte. Ltd.	Wo Kee Hong Centre, 29 Leng Kee Road, Singapore 159099, Singapore
SLOVAKIA	Bis Audio s.r.o.	Nam. SNP 10, 96001 Zvolem, Slovakia
SLOVENIA	Bofex	Smartinska 152, HALA V/3, 61000 Ljubljana, Slovenia
SOUTH AFRICA	Coherent Imports (PTY) Ltd.	P.O. Box 1614, Alberton, 1450, South Africa
SPAIN	Marantz Spain	Martinez Villergas 2, Apartado 2065, Madrid 28027, Spain
SRI LANKA	The listening Room	Mezzanine Floor, The Landmark 385, Galle Road, Colombo - 3, Sri Lanka
SWEDEN	Audio Nord	Almedalsvagen 4, Gotenborg 402-23, Sweden
SWITZERLAND	Sound Company AG	Postfach, 8010 Zürich, Switzerland
SYRIA	Hamzeh & Partners	Hafez Ibrahim Str. No 117, Damascus Shalan, Syria
TAHITI	Covecolor	Av. Prince Hinoi, Cours de l'union sacré, P.O. Box 2334, Papeete, Tahiti
TAIWAN	Pai-Yuing Co. Ltd.	6th No 148 Sung Kiang Road, Taipei 10429, Taiwan R.O.C.
THAILAND	MRZ Standard Co. Ltd.	746-750 Mahachai Road, Wangburapa, Bangkok 10200, Thailand
TUNESIA	Societe EDEVIG	40, Avenue du Golfe Arabe, El Menzah, 1004, Tunesia
TURKEY	Türk Philips Ticaret A.S.	Yukari Dudullu Organize sanayi Bolgesi, 2.Cadde no.28, 81260 Umraniye-Istanbul, Turkey
U.K.	Marantz Hifi UK Ltd.	Kingsbridge House, Padbury Oaks, 575-583 Bath Road, Longford, Middlesex UB7 0EH, U.K.
U.S.A.	Marantz America Inc.	440 Medinah Road, Roselle, IL 60172, U.S.A.
YUGOSLAVIA	ITM Company	Omladinskih Brigada 86, 11070 Belgrade, Yugoslavia
EXPORT	Marantz Domestic Sales	A division of Marantz Europe BV,Building SFF2, P.O. Box 80002, 5600 JB Eindhoven, The Netherlands

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